



Wireless Digital Wall Clock
Model AT-DDC4
Installation & User's Guide



THIS EQUIPMENT COMPLIES WITH FCC REQUIREMENTS PURSUANT SUBPART J OF PART-15

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING: Changes or modifications to this product not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

NOTE: This equipment has been tested and found to comply with the limits for a digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This Transceiver must not be co-located or operating in conjunction with any other antenna or Transceiver.

Disclaimer

The information within this document has been carefully checked and is believed to be entirely reliable. However, no responsibility is assumed for inaccuracies. Lathem Time Corp. reserves the right to make changes to any products herein to improve reliability, function, or design.

Introduction

The AirTime AT-DDC Wireless Digital Display Wall Clock is designed with a 4-inch red LED display that can be viewed from distances over 100 feet. The bright red display shows the hour and minutes and can be configured for a 12 or 24 Hour format.

The AT-DDC Wall Clock is synchronized by a Lathem ATX series transceiver's wireless correction signal.

The AT-DDC Wall Clock can be mounted directly to a wall, to a single gang outlet box or, with optional mounting kits, as double-faced units from the wall or ceiling.

Clock Operation

When the AT-DDC Wall Clock is connected to 110vAC power, the clock displays 12:00 AM and begins listening for a signal from an ATX series transceiver. Upon reception of the AirTime signal, (verified by a red LED flashing in the lower right corner), the clock will adjust to the correct time. The clock will continue to listen and correct itself as needed.

Power Cord Installation

A 3 wire grounded power cord is required. If the power cord will not be in conduit, secure the power cord with a cable clamp into the selected vent cap.

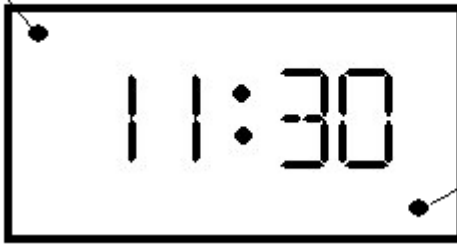
Remove the two phillips head screws from the left or the right end cap and remove. Slide the circuit board out of the case. Carefully flip the circuit board over and lay it face down on a clean, smooth work surface. Remove one of the vent caps from the case of the wall clock and route the power cord through it to the back of the circuit board. (If the power cord will be routed through the back of the clock using conduit, route the cord through the gang box and conduit access hole to the back of the circuit board assembly). Strip away 1/2" of the protective shield from each wire of the power cord. Locate the two black wires leading from the back of the circuit board. Using wire nuts, attach the AC In line of the cord to one and the AC Return line to the other (normally black is AC In and white is AC Return). Attach the ground wire of the cord, (normally green) to the green ground screw located on the inside back of the case. Slide the circuit board back into the case, replace the end cap and secure with the two phillips head screws.

Time Formats

The AT-DDC4 Series Wall Clocks can be set to display in 12 Hour or 24 Hour format. When in 12 Hour format, a red LED in the upper left corner of the display indicates PM hours. When in 24 Hour format, the hours are displays in Military style.

Front Panel

PM indicator



Red LED
(Flashes when
signal received)

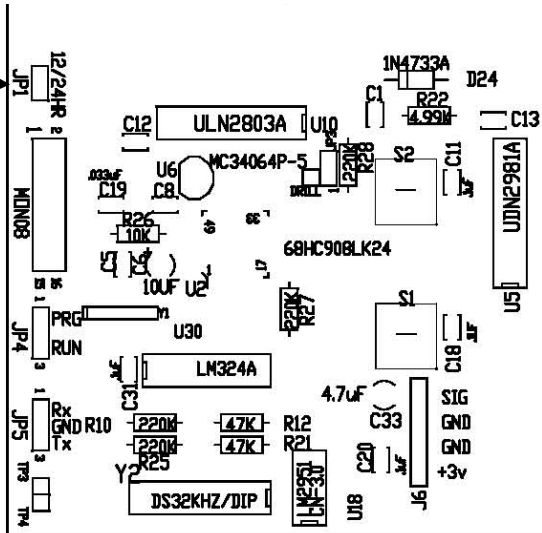
To set the display format, use the jumper (J1) located on the back of the circuit board which can be accessed by removing the right side end cap and sliding the circuit board out slightly.

Back Side of Circuit Board

Jumper J1

On = 12 Hour display

Off = 24 Hour display



12 Hour Format



AM



PM

24 Hour Format



AM



PM

Mounting

The AT-DDC Wall Clock can be mounted directly to a wall, to a single gang outlet box, double hung from the wall or double hung from the ceiling. When deciding where the clock will be mounted, keep in mind that 115VAC power is required.

Mounting to a Wall

Tools required for mounting the clock:

Drill with a 5/16" bit
Hammer
Phillips head screwdriver
Wall anchors
Pencil

- » After deciding the location where the clock will be mounted, make two marks 12" apart and horizontal.

Note: If mounting near a ceiling, make sure the holes are at least 2 1/4" away from the ceiling.

Note: Make sure you have at least 16" of side clearance on one side in order to remove the front panel.

- » Drill a 5/16" hole at each mark
- » Insert a wall anchor and tap it flush to the wall with the hammer.
- » Insert a screw into each wall anchor leaving 1/4" exposed.
- » Remove the two phillips head screws from the left or the right end cap and remove. Slide the front panel assembly out of the case and set aside.
- » Line up the two keyholes on the back of the case and slip over the two screws and tighten securely. (The lower mounting holes can be marked at this point, the case removed, holes drilled and wall anchors installed if so desired)
- » Slide the front panel display back into the case, replace the end cap and secure with the two phillips head screws.

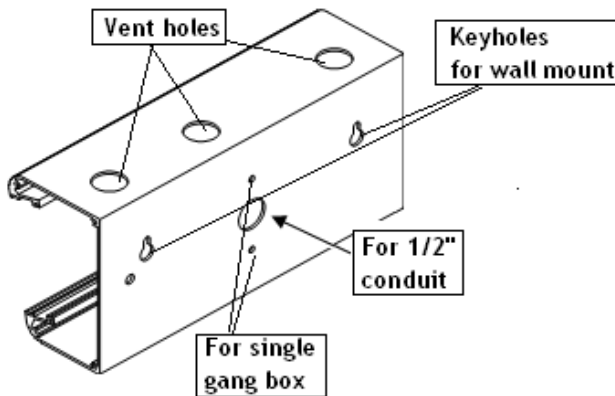
Mounting to a Single Gang Box

Two mounting holes have been located in the center of the case 2 1/4" apart for mounting to a single gang wall box. A 7/8" hole has been placed between the mounting holes that will accept conduit if desired.

Note: If mounting near a ceiling, make sure the top of the single gang box is at least 2 1/4" away from the ceiling.

Note: Make sure you have at least 16" of side clearance on one side in order to remove the front panel.

- » Remove the two phillips head screws from the left or the right end cap and remove. Slide the front panel assembly out of the case and set aside. Remove the desired vent cap that any
- » Line the two holes in the case up to the single gang box and insert proper screws for the single gang box and tighten securely.
- » Slide the front panel display back into the case, replace the end cap and secure with the two phillips head screws.



Double Mount - Wall

The AT-DDC requires optional mounting kit (SAM0625)

Tools required for mounting the clock:

Flat blade screwdriver
Phillips head screwdriver
15/16" open end wrench

The double wall mount plate attaches to a double or single gang box installed securely in the wall. Required wiring should be available through the gang box at time of installation.

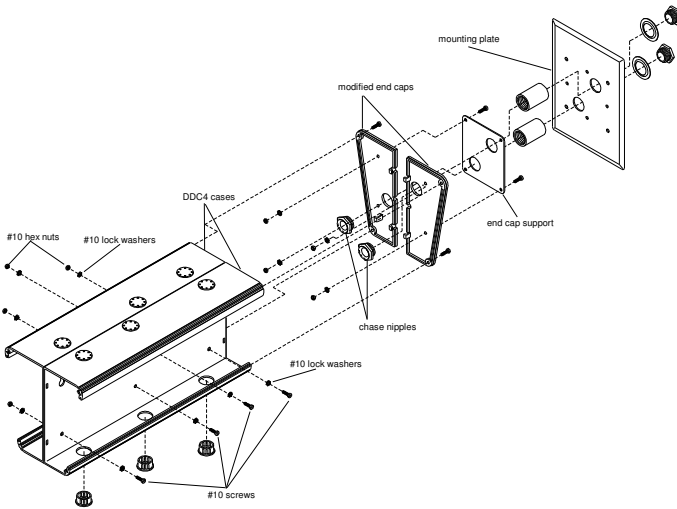
- » Remove the two chase nipples from the mounting plate posts.
- » Secure the mounting plate securely to the gang box with the proper screws. (not supplied)

Note: The long dimension of the mounting plate must be perpendicular to the ground to assure proper alignment of wall clocks.

Mounting - Wall

- » Remove the two phillips head screws from the left and the right end caps of the two DDC4 clocks and remove. Slide the front panel assemblies out of the cases and set aside.
- » Place the two DDC4 clocks back to back and secure by inserting a #10 screw through the two key holes and the two lower mounting holes using lock washers and nuts supplied with the mounting kit.
- » Attach the modified end cap to the end of the clocks that will be attached to the wall mount plate using the original end cap screws.
- » Align the holes of the end cap support plate with the holes in the modified end cap and secure with 4 #6 phillips head screws (supplied)

- » Line the two posts from the mounting plate up with the two holes of the modified end cap. Insert the chase nipples through the holes of the modified end cap and secure to the mounting plate with a 15/16" wrench.
- » Slide the front panel assemblies in partially. Secure the required wiring and install the battery if used.
- » Slide the front panel assemblies in fully. Install the end caps and secure each with its two screws.
- » Discard or store the two original end caps the modified end caps replaced.



Double Mount - Ceiling

Requires optional mounting kit (SAM0626)

Tools required for mounting the clock:

Flat blade screwdriver
Phillips head screwdriver
15/16" open end wrench

The double ceiling mount plate attaches to a double or single gang box installed securely in the ceiling. Required wiring should be available through the gang box at time of installation.

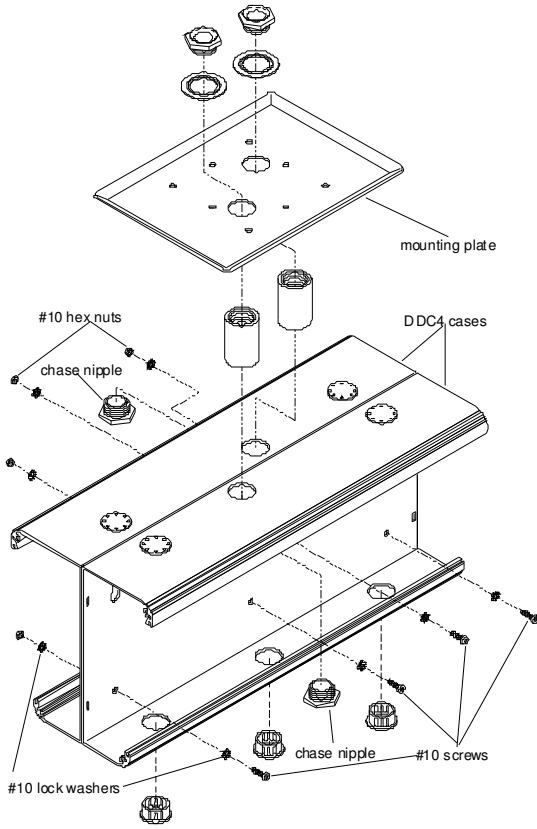
- » Remove the two chase nipples from the mounting plate posts.
- » Secure the mounting plate securely to the gang box with the proper screws. (not supplied)

Note: When mounting AT-DDC4 clocks, the long dimension of the mounting plate must be parallel to the long side of the clocks.

Mounting - Ceiling

Note: Make sure you have at least 16" of side clearance on one side in order to remove the front panel assembly.

- » Remove the two phillips head screws from the left and the right end caps of the two DDC4 clocks and remove. Slide the front panel assemblies out of the cases and set aside.
- » Place the two DDC4 clocks back to back and secure by inserting a #10 screw through the two key holes and the two lower mounting holes using lock washers and nuts supplied with the mounting kit. *Note: At this point, if the DDC4 clocks will be mounted too near a wall on one side to secure the end caps, install the "wall side" end caps now.*
- » Remove the center vent cap from the top of each DDC4 clock.
- » Line the two posts from the mounting plate up with the vent holes of the DDC4 clocks. Insert the chase nipples through the vent holes and secure to the mounting plate with a 15/16" wrench.
- » Slide the front panel assemblies in partially. Secure the required wiring and install the battery if used.
- » Slide the front panel assemblies in fully. Install the end caps and secure each with its two screws.



Specifications

Dimensions	6 3/4" H X 15 1/2" W X 3 1/8" D 17.1 cm H X 39 cm W X 7.9 cm D
Weight	9 lbs. (4.086 kg)
Display	3 3/4-Inch Red 4 Segment LED
Housing	Extruded aluminum main case with black textured paint, molded plastic end caps with black texture.
Line Power	115VAC, 80mA typical 220VAC, 80mA typical (optional)
FCC	Conforms to FCC Part 15
Environment	32° to 150° F (0° to 65° C) 95% Relative Humidity (non-condensing)
Mounting	Wall (surface) Single Gang Box (surface) Double Face (wall or ceiling) (optional)

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WARNING: Changes or modifications to this product not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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One Year Limited Warranty

Lathem warrants the hardware products described in this guide against defects in material and workmanship for a period of one year from date of original purchase from Lathem or from an authorized Lathem reseller. The conditions of this warranty and the extent of the responsibility of Lathem Time Corporation (“Lathem”) under this warranty are listed below.

1. This warranty will become void when service performed by anyone other than an approved Lathem warranty service dealer results in damage to the product.
2. This warranty does not apply to any product which has been subject to abuse, neglect, or accident, or which has had the serial number altered or removed, or which has been connected, installed, adjusted, or repaired other than in accordance with instructions furnished by Lathem.
3. This warranty does not cover dealer labor cost for removing and reinstalling the machine for repair, or any expendable parts that are readily replaced due to normal use.
4. The sole responsibility of Lathem under this warranty shall be limited to repair of this product, or replacement thereof, at the sole discretion of Lathem.
5. If it becomes necessary to send the product or any defective part to Lathem or any authorized service dealer, the product must be shipped in its original carton or equivalent, fully insured with shipping charges prepaid. Lathem will not assume any responsibility for any loss or damage incurred in shipping.
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7. Proof of date of purchase from Lathem or an authorized Lathem reseller is required for warranty service on this product.
8. This Warranty grants specific legal rights. Additional legal rights, which may vary by locale, may also apply.
9. Should any difficulties arise with the performance of this product during warranty, or with any Lathem authorized service centers, contact Lathem Time at the address below:

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